



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 19 80 45 12

Classification of the application (IPC):
C12N 5/077, C12N 5/0775, C12N 5/00, C01B 32/182, C01B 32/194

Technical fields searched (IPC):
C12N

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	Jiyong Kim ET AL: "Enhanced osteogenic commitment of mesenchymal stem cells on graphene oxide-incorporated biomaterials", Seoul National University Graduate School: Department of Chemical and Biological Engineering, KR 01 February 2017 (2017-02-01), pages 1-69 URL: https://s-space.snu.ac.kr/bitstream/10371/129452/1/000000141486.pdf [retrieved on 23 December 2021 (2021-12-23)] XP055875628 * Chapter 1:Material and Methods; Results * * abstract *	1-3, 5-8, 11-15
Y	KR 20140098714 A (SNU R&DB FOUNDATION [KR]; GRAPHENE SQUARE INC [KR]) 08 August 2014 (2014-08-08) * Claims 1-21 **Desc : 029; 075*	1-15
Y	AKHAVAN OMID ET AL: "Graphene nanogrids for selective and fast osteogenic differentiation of human mesenchymal stem cells" <i>CARBON</i> GB 01 August 2013 (2013-08-01), vol. 59, DOI: 10.1016/j.carbon.2013.03.010, ISSN: 0008-6223, pages 200-211, XP055875808 * conclusion;figure 6 *	1-15
Y	KIM JANGHO ET AL: "Synergistic effects of nanotopography and co-culture with endothelial cells on osteogenesis of mesenchymal stem cells" <i>BIOMATERIALS, ELSEVIER, AMSTERDAM, NL</i>, 05 July 2013 (2013-07-05), vol. 34, no. 30, DOI: 10.1016/J.BIOMATERIALS.2013.06.029, ISSN: 0142-9612, pages 7257-7268, XP028679364 * material and methods;figures 2-5 *	1-15

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search Munich	Date of completion of the search 05 January 2022	Examiner Trommsdorff, Marion
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CATEGORY OF CITED DOCUMENTS

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Y	RO HYUNUK ET AL: "Osteogenic priming of mesenchymal stem cells by chondrocyte-conditioned factors and mineralized matrix" <i>CELL AND TISSUE RESEARCH</i> , SPRINGER, DE, 09 May 2015 (2015-05-09), vol. 362, no. 1, DOI: 10.1007/S00441-015-2195-7, ISSN: 0302-766X, pages 115-126, XP035534476 * material and methods; figures 3-6 *	1-15
Y	N. S. HWANG ET AL: "In vivo commitment and functional tissue regeneration using human embryonic stem cell-derived mesenchymal cells" <i>PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES</i> , 30 December 2008 (2008-12-30), vol. 105, no. 52, DOI: 10.1073/pnas.0809680106, ISSN: 0027-8424, pages 20641-20646, XP055266736 * abstract; figures 3-5 *	1-15
Y	KIM JANGHO ET AL: "Bioactive effects of graphene oxide cell culture substratum on structure and function of human adipose-derived stem cells : Graphene Oxide for Modulating Structure and Function of hASCs" <i>JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A</i> US 24 April 2013 (2013-04-24), vol. 101, no. 12, DOI: 10.1002/jbm.a.34659, ISSN: 1549-3296, pages 3520-3530, XP055873628 * material and methods; figures 6, 7 *	1-15
T	DELIORMANLI AYLIN M ET AL: "Biological Response of Osteoblastic and Chondrogenic Cells to Graphene-Containing PCL/Bioactive Glass Bilayered Scaffolds for Osteochondral Tissue Engineering Applications" <i>APPLIED BIOCHEMISTRY AND BIOTECHNOLOGY</i> , HUMANA PRESS INC, NEW YORK, 25 May 2018 (2018-05-25), vol. 186, no. 4, DOI: 10.1007/S12010-018-2758-7, ISSN: 0273-2289, pages 972-989, XP036628587 * abstract *	

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search Munich	Date of completion of the search 05 January 2022	Examiner Trommsdorff, Marion
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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
KR 20140098714	A	08-08-2014	NONE	